

AMENDMENTS TO THE CLAIMS

Please cancel Claims 62 and 68; and amend Claims 61, 65, 66 and 71 as follows.

LISTING OF CLAIMS

1.-60. (cancelled)

61. (currently amended) A cooling apparatus comprising:

a refrigerant tank defining an evaporating region for reserving a refrigerant to be boiled and vaporized by heat of a heating body;

a radiator defining a condensing region for releasing heat of the refrigerant vaporized in said refrigerant tank to an external fluid;

a first boiling area increasing means disposed in said evaporating region of said refrigerant tank, said first boiling area increasing means arranged at a lower side of said refrigerant tank for dividing an inside of said evaporating region of said refrigerant tank into a plurality of first vertically extending passages, and

a second boiling area increasing means disposed in said evaporating region of said refrigerant tank, said second boiling area increasing means arranged at an upper side of said refrigerant tank for dividing the inside of said evaporating region of said refrigerant tank into a plurality of second vertically extending passages, wherein

said second boiling area increasing means horizontally offsets from said first boiling area increasing means for allowing said first vertically extending passages to communicate with said second vertically extending passages[.].

said refrigerant tank is substantially vertically arranged, and

an average open area of said second vertically extending passages is larger than an average open area of said first vertically extending passages.

62. (cancelled)

63. (previously presented) A cooling apparatus according to Claim 61, wherein said first and second boiling area increasing means include corrugated fins to define said first and second vertically extending passages, respectively.

64. (previously presented) A cooling apparatus according to Claim 63, wherein said corrugated fins have openings at side surfaces thereof.

65. (currently amended) ~~A cooling apparatus according to Claim 63, wherein~~
A cooling apparatus comprising:
a refrigerant tank defining an evaporating region for reserving a refrigerant
to be boiled and vaporized by heat of a heating body;
a radiator defining a condensing region for releasing heat of the refrigerant
vaporized in said refrigerant tank to an external fluid;
a first boiling area increasing means disposed in said evaporating region
of said refrigerant tank, said first boiling area increasing means arranged at a lower side
of said refrigerant tank for dividing an inside of said evaporating region of said
refrigerant tank into a plurality of first vertically extending passages, and

a second boiling area increasing means disposed in said evaporating region of said refrigerant tank, said second boiling area increasing means arranged at an upper side of said refrigerant tank for dividing the inside of said evaporating region of said refrigerant tank into a plurality of second vertically extending passages, wherein

said second boiling area increasing means horizontally offsets from said first boiling area increasing means for allowing said first vertically extending passages to communicate with said second vertically extending passages,

said first and second boiling area increasing means include corrugated fins to define said first and second vertically extending passages, respectively,

said corrugated fins have louvers at side surfaces thereof.

66. (currently amended) A cooling apparatus comprising:

a refrigerant tank defining an evaporating region for reserving a refrigerant to be boiled and vaporized by heat of a heating body;

a radiator defining a condensing region for releasing heat of the refrigerant vaporized in said refrigerant tank to an external fluid;

a first boiling area increasing means disposed in said evaporating region of said refrigerant tank, said first boiling area increasing means arranged at a lower side of said refrigerant tank for dividing an inside of said evaporating region of said refrigerant tank into a plurality of first vertically extending passages, and

a second boiling area increasing means disposed in said evaporating region of said refrigerant tank, said second boiling area increasing means arranged at

an upper side of said refrigerant tank for dividing the inside of said evaporating region of said refrigerant tank into a plurality of second vertically extending passages, wherein

said first boiling area increasing means and said second boiling area increasing means are arranged to provide a space therebetween for allowing said first vertically extending passages to communicate with said second vertically extending passages[.].

said refrigerant tank is substantially vertically arranged, and

an average open area of said second vertically extending passages is larger than an average open area of said first vertically extending passages.

67. (previously presented) A cooling apparatus according to Claim 66, wherein said second boiling area increasing means horizontally offsets from said first boiling area increasing means.

68. (cancelled)

69. (previously presented) A cooling apparatus according to Claim 66, wherein said first and second boiling area increasing means include corrugated fins to define said first and second vertically extending passages, respectively.

70. (previously presented) A cooling apparatus according to Claim 69, wherein said corrugated fins have openings at side surfaces thereof.

71. (currently amended) ~~A cooling apparatus according to Claim 69, wherein~~

A cooling apparatus comprising:

a refrigerant tank defining an evaporating region for reserving a refrigerant to be boiled and vaporized by heat of a heating body;

a radiator defining a condensing region for releasing heat of the refrigerant vaporized in said refrigerant tank to an external fluid;

a first boiling area increasing means disposed in said evaporating region of said refrigerant tank, said first boiling area increasing means arranged at a lower side of said refrigerant tank for dividing an inside of said evaporating region of said refrigerant tank into a plurality of first vertically extending passages, and

a second boiling area increasing means disposed in said evaporating region of said refrigerant tank, said second boiling area increasing means arranged at an upper side of said refrigerant tank for dividing the inside of said evaporating region of said refrigerant tank into a plurality of second vertically extending passages, wherein

said first boiling area increasing means and said second boiling area increasing means are arranged to provide a space therebetween for allowing said first vertically extending passages to communicate with said second vertically extending passages,

said first and second boiling area increasing means include corrugated fins to define said first and second vertically extending passages, respectively,

said corrugated fins have louvers at side surfaces thereof.